BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2009-293-E - ORDER NO. 2010-12

JANUARY 21, 2010

IN RE:	South Carolina Electric & Gas Company's Update of Construction Progress and Request for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina	))))))	ORDER APPROVING UPDATES AND REVISIONS TO SCHEDULES

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the "Commission") on the request of South Carolina Electric & Gas Company ("SCE&G" or the "Company") for an order approving updated milestone and capital costs schedules for the construction of two 1,117 net megawatt nuclear power units that SCE&G is building at the site of the V.C. Summer Nuclear Station near Jenkinsville, South Carolina (the "Units"). SCE&G filed the request in this docket (the "Request") on July 20, 2009 pursuant to the provisions of the Base Load Review Act (the "BLRA"), specifically S.C. Code Ann. § 58-33-270(E) (Supp. 2009). Under that statute, a utility "may petition the Commission . . . for an order modifying any of the schedules, estimates, findings, class allocation factors, rate designs, or conditions that form part of any base load review order." S.C. Code Ann. § 58-33-270(E). Further, "[t]he Commission shall grant the relief requested if, after a hearing, the Commission finds . . .(1) the changes are not the result of imprudence on the part of the utility; and ...(2) the proposed class allocation

factors or rate designs are just and reasonable." Id. As no changes were proposed to class allocation factors or rate designs which the Commission approved in Base Load Review Order No. 2009-104(A), the just and reasonable standard of condition (2) is met. The issue before this Commission is whether or not the changes proposed are the result of imprudence on the part of the utility. SCE&G, as the regulated entity involved in the project, carries the ultimate responsibility for successful completion of the activities addressed in its Petition.

The Commission initially approved construction milestone and costs schedules for the Units in Order No. 2009-104(A) (the "BLRA Order") which was issued on March 2, 2009. In the BLRA Order, the Commission approved a construction schedule for the Units comprising 123 milestones which were contained in Exhibit E to SCE&G's application ("Combined Application") in that docket ("Exhibit E"). The Commission also approved a schedule of anticipated capital costs for the Units which reflected the annual forecasted construction cash flow for the project. That cash flow was provided in Exhibit F to the Combined Application in that docket ("Exhibit F").

In the present proceeding, SCE&G seeks approval of updated versions of Exhibit E and F. The updated construction schedule was entered into the record of this proceeding as Hearing Exhibit No. 2 (SAB-3) – Public Version and is attached hereto as **Order Exhibit No. 1**. The updated capital cost schedule was submitted as Hearing Exhibit No. 12 (CLW-1) – Public Version and is attached hereto as **Order Exhibit No. 2**. These updated exhibits reflect current construction schedules and cash flow projections associated with the Units. The new schedules do not affect the substantial completion

dates for the Units, which remain April 1, 2016 and January 1, 2019. Nor do the updated schedules affect the cost of the Units in 2007 dollars, which remains $4.5 billion before escalation and Allowance for Funds Used During Construction.

As required by S.C. Code Ann. § 58-33-270(E), SCE&G provided notice of the filing in this docket to the South Carolina Office of Regulatory Staff ("ORS"). On July 28, 2009, the Commission's Docketing Department instructed the Company to publish by August 21, 2009 a Notice of Filing and Hearing in newspapers in general circulation in the area where it serves retail electric customers and to provide a copy of that notice to these customers by U.S. mail. On August 21, 2009 and September 9, 2009, the Company filed affidavits with the Commission demonstrating that the notice was duly published and mailed in accordance with the Docketing Department's instructions.

Timely petitions to intervene in this docket were received from South Carolina Energy Users Committee ("SCEUC") and Friends of the Earth ("FOE"). ORS is automatically a party to the proceedings in this docket pursuant to S.C. Code Ann. § 58-4-10 (Supp. 2009). No other parties sought to intervene in this proceeding.

The Commission convened a hearing on this matter on November 4, 2009 with the Honorable Elizabeth B. Fleming, Chairman, presiding. SCE&G was represented by K. Chad Burgess, Esq. and Belton T. Zeigler, Esq. ORS was represented by Shannon Bowyer Hudson, Esq. SCEUC was represented by Scott Elliott, Esq. and FOE was represented by Robert Guild, Esq.

In support of the Request, the Company presented the direct testimony of Stephen A. Byrne, Executive Vice President for Generation and Chief Nuclear Officer of

SCE&G; Carlette L. Walker, Vice President for Nuclear Finance Administration; and Alan D. Torres, Manager of Construction for Virgil C. Summer Nuclear Station Units 2 and 3. ORS presented the direct testimony of Mark W. Crisp, Managing Consultant of C. H. Guernsey and Company. No witnesses testified on behalf of FOE or SCEUC.

Under the BLRA, in cases where a settlement agreement has been entered into between ORS and the utility, the Commission is authorized to "accept the settlement agreement as disposing of the matter, and [to] issue an order adopting its terms, if it determines that the terms of the settlement agreement comport with the terms of this act." S.C. Code Ann. § 58-33-270(G). Prior to the hearing in this matter, SCE&G, ORS, and SCEUC entered into a stipulation in which the parties agreed that the relief requested by SCE&G was justified and should be granted, while protecting the rights of SCEUC to pursue certain issues related to Exhibit F which it has raised in an appeal of the BLRA Order (the "Stipulation"). As part of the Stipulation, ORS and SCEUC agreed that the changes SCE&G sought in the milestone and cost schedules for the Units "are the result of refining and improving the timing and sequence of construction activities [related to the Units] and are not the result of imprudence by SCE&G." Stipulation at ¶ 8. This Stipulation was admitted into the record of the November 4, 2009 hearing as Hearing Exhibit 1.

II. DISCUSSION

For the reasons set forth below, the Commission finds that the Stipulation comports with the terms of the BLRA and should be adopted. Specifically, the evidence of record establishes that the proposed changes in Exhibits E and F are the result of

improvements or refinements in the construction schedule for the Units. The proposed changes are not the result of any imprudence by SCE&G, and so under the terms of S.C. Code Ann. §§ 58-33-270(E) and 58-33-270(G) should be approved. The facts and evidence of record supporting this conclusion are as follows:

a. Modification of the Construction Schedule

On May 23, 2008, SCE&G entered into an Engineering, Procurement and Construction Agreement for the Units (the "EPC Contract") with a consortium formed by Westinghouse Electric Company, LLC, and Shaw, Inc. ("Westinghouse/Shaw"). One week later, on May 30, 2008, SCE&G filed its Combined Application for the BLRA Order for the Units. At the hearing on the Combined Application, the Company's Executive Vice President for Generation and Chief Nuclear Officer, Stephen A. Byrne, testified concerning the construction schedule. In his testimony in this proceeding, Mr. Byrne reminded the parties that he had testified in 2008 that the schedule contained in the EPC Contract and reflected in the milestones set forth in Exhibit E to the Combined Application was a generic schedule for the construction of two Westinghouse AP1000 units with certain site-specific elements added to it. Tr. pp. 22, l. 22 – 23, l. 4. The purpose of that initial schedule, according to Mr. Byrne, was to demonstrate that the substantial completion dates for the Units were feasible and to support initial procurement and contracting for the project. Tr. p. 24, l. 1 – 4.

Mr. Byrne further testified, as he did in the hearing on the Combined Application, that, at the time the EPC Contract was signed, all of the parties understood that Westinghouse/Shaw would do substantial work in the succeeding months to improve the

schedule and integrate the many activities reflected in it. Tr. p. 23, l. 4 - 8. In recognition of this fact, the EPC Contract required Westinghouse/Shaw to provide a more fully integrated construction schedule to SCE&G which was ultimately delivered on April 1, 2009. Tr. p. 23, l. 15 - 18. This schedule is known as the Performance Management Baseline Schedule (the "PMBS"). The PMBS incorporates equipment procurement and delivery commitments negotiated with vendors and suppliers since May 2008 as well as a more detailed integration of site-specific and non-site specific construction activities for the Units. Tr. p. 21, l. 16 - 20. According to Mr. Byrne, the PMBS represents a major refinement of the initial project schedule. Tr. pp. 21, l. 20 – 22, l. 2.

As Mr. Byrne stated in his testimony in this proceeding:

> I would like to emphasize that in large scope construction projects, it is common for a preliminary schedule to be prepared to support contract negotiation, to guide initial negotiations with vendors and to demonstrate that the project can be completed within the time frame required. Once a contract is signed, the parties typically devote a great deal of time and effort to refine that schedule, both through internal planning and by reaching binding commitments with vendors, suppliers and subcontractors. In the case of this project, extensive review and refining of the schedule took place between May of 2008 and April of 2009. That process resulted in the changes discussed here. These changes are consistent with customary practice in large scope construction projects. They represent a normal evolution of the construction plan, and are not the result of problems, mistakes or errors in the initial construction plan or in the engineering and procurement of the plant. The updated milestone schedule still supports the substantial completion dates of the Units of April 1, 2016 and January 1, 2019, which are the most important milestones in the project.

Tr. pp. 38, l. 15 – 39, l. 14.

In order to better coordinate with the PMBS, SCE&G has unbundled several of the milestones approved in the BLRA Order, and the 123 milestones approved in the

BLRA Order are now being tracked as 146 milestones. Tr. p. 24, l. 14 – 21. As Mr. Byrne's testimony indicates, milestones have been delayed where the procurement, fabrication, or delivery of major pieces of equipment could be scheduled later than originally anticipated without affecting the overall project schedule. [1] Tr. p. 25, l. 4 – 7. Mr. Byrne stated that pushing back the delivery dates for equipment reduces the need to store equipment on site, which reduces the risk of damage to the equipment. Tr. p. 25, l. 7 – 12. In addition, closer synchronization of delivery dates and installation dates for major equipment provides better management of the physical site since less equipment is being stored on it. Id. According to the ORS's expert witness, Mr. Crisp:

> These revisions neither cause the original [commercial operation dates] to change, nor do the changes in the schedule dates impact the approved capital cost established in the BLRA Order. Instead, there should be a pricing benefit in moving some of the milestones.

Tr. p. 241, l. 20 – 23.

SCE&G has also updated the schedule for the transmission-related construction that SCE&G will undertake directly. The new schedule for transmission construction is now fully integrated with the requirements for transmission service to support pre-operational testing of the Units. Tr. p. 22, l. 9 – 12. In addition, certain transmission-related construction can only take place during the scheduled outages for Unit 1. These

[1] The milestones that are unchanged or accelerated include all of the major milestones for the project such as the placement of the first nuclear concrete for the Units (Milestone 11-4Q-1; 13-3Q-5); the setting of the reactor vessels, containment vessels, pressurizer vessels and steam generators for the Units (Milestones 13-2Q-1; 13-3Q-1; 13-4Q-1; 14-1Q-1; 16-2Q-1; 16-3Q-1; 16-4Q-1); the cold hydro tests for the Units (Milestones 15-1Q-2; 18-2Q-1); the hot functional tests for the Units (Milestones 15-3Q-1; 18-2Q-1); completion of fuel loading for the Units (15-4Q-1; 18-3Q-1); and ultimately the substantial completion of the Units (Milestones 16-1Q-1; 19-1Q-1).

outages occur every 18 months. Tr. p. 22, l. 6 – 8. The new transmission schedule is now fully synchronized with the outage schedule for Unit 1. Tr. p. 37, l. 15 – 17.All of the proposed milestone changes contained in the updated schedules are within the schedule contingencies approved in the Base Load Review Order. Specifically, none of the milestones have been extended beyond 18 months or accelerated more than 24 months. Tr. p. 25, l. 12 – 13.

The ORS's independent construction expert, Mr. Crisp, has extensive experience in management of utility construction projects. He testified that schedule updates of the sort proposed here are a common and accepted part of large construction projects.

> In this type of a project, as intricate as it is, with the duration of a ten-year construction project, particularly when you are establishing your initial schedule, based on the best information available, it is not unusual to do what I have referred to in testimony at the BLRA hearing as a shaking-out process. Certainly, you're going to be concerned if this process continues, but at this point in time, there's absolutely no impact to the commercial operation date, no impact in the financials, in terms of the 2007 dollars, and -- but what the benefit of this has is that it integrates the PMBS, the performance measure[ment] milestone schedule -- or, excuse me – performance measure[ment] baseline schedule, with the milestone schedule, to make it so that it is a much cleaner, integrated process to review.

Tr. pp. 279, l. 14 – 280, l. 5.

The evidence of record establishes that the requested schedule modifications are the result of routine and necessary refinements to the construction schedule that are to be expected in projects of this nature. The Commission notes that all of the Parties, with the exception of intervenor FOE, have stipulated to this conclusion and support the Commission granting the relief requested here.

For its part, FOE did not sponsor any testimony at the hearing and so presented no direct testimony challenging the conclusions of Mr. Byrne and Mr. Crisp that the

proposed schedule updates were the result of normal and expected refinement of the construction schedules for the project, and not imprudence. Through cross examination, FOE entered into evidence an October 15, 2009 letter from the Nuclear Regulatory Commission (the "NRC") indicating that a design methodology report recently submitted by Westinghouse for the AP1000 shield building was not satisfactory. See Hearing Exhibit No. 4. The report related to Westinghouse's Design Control Document Revision 17 ("DCD Rev. 17"). DCD Rev. 17 incorporates design revisions to the shield building design for AP1000 units to increase resistance to aircraft impacts and to deal with other changes in design standards or testing methodologies adopted by the NRC. NRC's certification of DCD Rev. 17 will be a prerequisite to SCE&G obtaining its Combined Operating License ("COL") from the NRC. SCE&G anticipates receiving the COL in 2011.

Although FOE's concerns are understandable,the milestone changes proposed here are based on the PMBS, not DCD Rev. 17. SCE&G is not seeking to change any milestone based on concerns that the anticipated date of the approval of DCD Rev. 17 by the NRC will be delayed. In fact, the PMBS on which the revised milestones are based was provided to SCE&G on April 1, 2009.

Along with other utilities that have purchased AP1000 units, SCE&G has been actively pressing Westinghouse to resolve issues related to DCD Rev. 17 in a timely way. Tr. p. 42, l. 4 – 12. Company Witness Torres testified that the Construction Planning Group is currently working on alternatives to respond positively to any delays in NRC

licensing and is identifying reasonable and practical ways to keep the project on schedule in the event that there are licensing delays. Tr. p. 165, l. 1 – 17.

Mr. Crisp's testimony supported the Company's position. He testified that, while significant, the NRC's concerns with DCD Rev. 17 are being addressed by Westinghouse and that those concerns do not place the NRC's approval of the DCD or the subsequent COL in jeopardy. Tr. p. 268, l. 11 – 18. Mr. Crisp testified that he did not consider there to be any imprudence on SCE&G's part related to any of these issues. Tr. p. 268, l. 10 – 11. Accordingly, the Commission finds that the information presented by FOE related to the NRC licensing process for the AP1000 design does not create an impediment to approving the schedule updates proposed by SCE&G.In addition, SCE&G's prudence in its selection of Westinghouse's technology or management of this aspect of the project is not here called into question.

At the hearing in this matter, FOE correctly pointed out that when a new milestone schedule is adopted by the Commission, the schedule contingencies approved in the BLRA Order (i.e., 18 months for delay, 24 months for acceleration) would apply to the new milestones. FOE, however, argues that this is a reason for the Commission to deny the request to update the milestone schedule. Seventy-two percent (72%) of the milestones at issue here are either unchanged or accelerated. This group includes all the major milestones related to the setting of key components for the Units, the functional testing of the Units, and the substantial completion of them.

Both the accelerated and delayed milestones within the updated schedule benefit the project while not affecting the operation dates of Units 2 and 3 as approved in the

BLRA Order. Schedule contingencies remain necessary to "reflect the fact that there are inevitable risks and uncertainties surrounding a construction project as complex as that envisioned here." Order No. 2009-104(A), p. 99. Also, since the proposed changes do not alter the operation dates of the of the units, delays to the new milestone dates cannot be such that the originally approved operation dates would extend more than 18 months beyond April 1, 2016 and January 1, 2019.

For the foregoing reasons, the Commission finds that the requested modifications to the construction schedule for the Units are reasonable and prudent. As the evidence indicates, the requested modifications are the result of anticipated refinements to the construction schedule resulting from, among other things, additional schedule integration and vendor commitments made subsequent to SCE&G's filing of Exhibit E and the Combined Application. The evidence supports SCE&G's position that these modifications are a refinement of an initial construction schedule and will improve the Company's ability to track the progress of the project. Nothing in the record demonstrates that these shifts are the result of any imprudence on the part of SCE&G.

b. Modification of Capital Cost Schedule

In addition to modifications to the construction schedule, SCE&G has asked the Commission to adopt a modified capital cost schedule for the Units going forward. See Order Exhibit No. 2. As noted above, in the BLRA Order the Commission approved Exhibit F as the capital cost schedule for the Units.

Company Witness Walker sponsored the updated capital cost schedule. It includes changes to the cash flow forecast that have resulted from the PMBS, as well as

changes related to updating of the owner's costs and transmission costs forecasts.

According to Ms. Walker,

> As a result of the modifications to the construction schedule contained in the PMBS, the contractors for the project, Westinghouse Electric Corporation, LLC and Shaw ("Westinghouse/Shaw") provided SCE&G with an updated project cash flow in April 2009. This schedule shows the changes in cash flow caused by the shifting of milestones associated with equipment deliveries and other changes in the construction schedule, as well as better information concerning the sequencing of progress payments to vendors while equipment is being fabricated. As to this latter point, the original cost schedules contained conservative assumptions as to the timing and amount of the progress payments that would be required. Westinghouse has now negotiated the purchase orders for the majority of the equipment for the project. The revised cost schedules reflect the actual payment schedules under executed purchase orders, which in aggregate has shifted the cash flows associated with these progress payments further into the future than was assumed in the initial cost schedules.

Tr. pp. 207, l. 11 – 208, l. 4.

In addition, SCE&G has modified the schedule for incurring owner's costs for the project based upon the additional work it has done in refining the schedule for those activities it is responsible to complete and pay for as owner of the project. These modifications incorporate the construction schedule modifications made by SCE&G's transmission planning department to reflect the revised schedule for transmission construction which are discussed above. Tr. p. 208, l. 5 – 10.

The modifications in the cash flow schedules are timing-related changes only and do not affect the overall cost of the project in 2007 dollars before Allowance for Funds Used During Construction (AFUDC). Tr. p. 213, l. 20 – 24. The overall cost of the Units, according to the testimony of Ms. Walker, remains $4.5 billion as approved in the BLRA Order. Tr. pp. 213, l. 24 – 214, l. 1. While the overall cost of the project, in 2007 dollars before AFUDC, remains unchanged, the new cash flow schedule does change the

forecasted escalation for the project. Ms. Walker testified that compared to the forecast reflected in the BLRA Order, and based on inflation indices current at the time of the hearing, the changes in project cash flow would increase escalation by $118 million.[2] Tr. p. 216, l. 2 – 4. This $118 million increase is strictly the result of the effect of escalation on changes in the timing of the projected costs of the Units. It is not the result of changes in underlying costs as measured in 2007 dollars. Tr. p. 217, l. 19 – 24. Ms. Walker noted that the $118 million amount is predicated on the current forecasts of escalation and will change as escalation rates change from period to period. Tr. p. 216, l. 4 – 6. The record demonstrates that, even with increases resulting from escalation, all of the costs currently reflected in the updated costs schedule are within the approved capital cost scheduling contingencies set forth in the BLRA Order. Tr. p. 216, l. 6 – 10.

ORS's witness, Mr. Crisp, confirmed the need to revise cash flow projections to reflect modifications and improvements to the underlying construction schedules. Tr. p. 242, l. 11 – 13. Mr. Crisp confirmed that the revisions to the cash flow schedule do not change the overall cost of the project, $4.5 billion in 2007 dollars net of AFUDC. Tr. p. 242, l. 14 – 15. Mr. Crisp further testified that the changes to the cash flow schedule would result in increases to the escalation for the project but that escalation was more sensitive to changes in the actual indices for the project than to modifications in the timing of cash flows, such as those at issue here. Tr. p. 244, l. 15 – 17.

[2] Escalation accounted for a $510 million increase in total project cash flows. Of this amount, $392 million related to changes in the applicable escalation rates. Changes in cost schedules accounted for $118 million of the forecasted increase in escalation.

In the Stipulation, ORS and the SCEUC agreed that these modifications to the approved capital cost schedules for the project are appropriate. The only remaining party, FOE, did not present any evidence challenging this aspect of SCE&G's request. The Commission finds that the requested modification of the capital cost schedule for the Units does not alter the approved cost for the project of $4.5 billion in 2007 dollars, net of AFUDC and is not the result of any imprudence on the part of SCE&G. Pursuant to S.C. Code Ann. § 58-33-270(E), these modified capital cost schedules are approved. The specific capital cost schedule is the cumulative annual amount of the line "Total Project Commitment (2007$)" found on Order Exhibit No. 2.[3]

c. Confidentiality

In keeping with Commission orders in the previous proceeding (see Order Nos. 2008-467, 2008-696, 2008-752), SCE&G prepared and filed, under seal, confidential versions of its Quarterly Report for the Second Quarter of 2009 and Exhibits SAB1, SAB-1 and CLW-1 (Hearing Exhibits Nos. 2 and 12) which were filed with the testimony in this proceeding. The confidential versions of these documents preserved as

[3] The line in Order Exhibit No. 2 (Hearing Exhibit No. 12 (CLW-1)) entitled "Total Project Commitment (2007$)" provides the updated schedule of cash flows for the project as updated in this proceeding before escalation and Allowance for Funds Used During Construction. When the amounts listed in that line are cumulated year by year, they equal the $4.5 billion capital cost approved for the Units in Order No. 2009-104(A). The cumulative annual amounts listed as "Total Project Commitment (2007$)" also constitute the updated version of the "Cumulative Project Cash Flow" for the project which was originally set forth on Exhibit F, Chart A to the Combined Application in Docket 2009-196-E and was approved as the anticipated schedule of capital costs for the project in Order No. 2009-104(A). As a result, the "Total Project Commitment (2007$)" is the appropriate schedule to approve in this proceeding as the approved schedule of capital costs for the Units. The line on Order Exhibit No. 2 that is listed as "Cumulative Project Cash Flow, Revised" is not the appropriate schedule to reference as the approved schedule of capital costs for the Units because it includes escalation which Order No. 2009-104(A) provides will vary from period to period. *Cf.* Tr. p. 216, l. 11 – 16; pp. 228, l.16 – 233, l. 24.

confidential certain detailed cost information and related data that SCE&G are required by Westinghouse/Shaw to maintain as confidential under the EPC Contract. By Order Nos. 2009-628 and No. 2009-676, the Commission granted SCE&G's request for confidential treatment of this information. No party objected to SCE&G's requests or sought rehearing of the orders granting them. At the hearing in this matter, intervenor FOE noted on the record that it had objected to the grant of confidential treatment for similar information in prior proceedings. However, FOE did not present any argument or evidence in opposition to the earlier orders granting confidential treatment to this information. The Commission reaffirms those rulings.

III. FINDINGS AND CONCLUSIONS

1. S.C. Code Ann. § 58-33-270(E) provides that an electric utility may petition the Commission for an order modifying any of the schedules, estimates, findings, class allocation factors, rate designs, or conditions that form part of any base load review order issued under the BLRA. S.C. Code Ann. § 58-33-270(E) further provides, in part, that the Commission shall approve such modifications if the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility.

2. On March 2, 2009, the Commission issued a base load review order, Order No. 2009-104(A), in response to SCE&G's Combined Application in Docket No. 2008-196-E.

3. On July 20, 2009, SCE&G filed its annual update of construction progress for the Units approved in Order No. 2009-104(A) and requested modifications to the approved construction schedule and projected capital cost schedule set forth in that order.

4. As set forth above, ORS has examined SCE&G's request and, along with intervenor SCEUC, has entered into a stipulation with SCE&G agreeing that the requested modifications to the approved schedules should be approved as filed and that the requested modifications are not the result of any imprudence on the part of SCE&G.

5. As set forth above, the Commission finds that the requested modifications to the approved construction schedule are reasonable and are not the result of any imprudence on the part of SCE&G. Consequently, pursuant to S.C. Code Ann. § 58-33-270(E), the Commission approves the updated construction schedule set forth in Hearing Exhibit No. 2 (SAB-3), attached hereto as Order Exhibit No. 1, as the approved construction schedule for the Units going forward.

6. The Commission also finds that the requested modifications to the capital cost schedule are reasonable and not the result of any imprudence on the part of SCE&G. The updated schedule for capital costs set forth in Hearing Exhibit No. 12 (CLW-1), attached hereto as Order Exhibit No. 2, is hereby approved as the capital costs schedule for the Units going forward.

7. The Commission finds that the requested modifications do not alter the approved substantial completion dates for the Units of April 1, 2016 for Unit 2 and January 1, 2019 for Unit 3.

8. The Commission finds that the requested modifications do not alter the approved total cost for the Units of $4.5 billion in 2007 dollars net of AFUDC.

9. The future quarterly reports filed by SCE&G under S.C. Code Ann. § 58-27-277 shall reflect the modified schedules approved in this Order.

10. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Elizabeth B. Fleming

Elizabeth B. Fleming, Chairman

ATTEST:

John E. Howard, Vice Chairman

(SEAL)

Order Exhibit No. 1
Docket No. 2009-293-E
Order No. 2010-12
January 21, 2010

218978

South Carolina Electric and Gas
Exhibit No. _____ (SAB-3)

Updated Milestone Description	Revised Completion Date	Actual Completion Date
08-2Q-1 Approve Engineering, Procurement and Construction Agreement	5/23/2008	5/23/2008
08-2Q-2 Issue P.O.'s to nuclear component fabricators for Units 2 and 3 Containment Vessels	12/3/2008	12/3/2008
08-2Q-2 Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - First Payment - Unit 2	8/31/2008	8/31/2008
08-2Q-2 Contractor Issue PO to Accumulator Tank Fabricator - Unit 2	7/31/2008	7/31/2008
08-2Q-2 Contractor Issue PO to Core Makeup Tank Fabricator - Units 2 & 3	9/30/2008	9/30/2008
08-2Q-2 Contractor Issue PO to Squib Valve Fabricator - Units 2 & 3	3/31/2009	3/31/2009
08-2Q-2 Contractor Issue PO to Steam Generator Fabricator - Units 2 & 3	6/30/2008	6/30/2008
08-2Q-2 Contractor Issue Long Lead Material PO to Reactor Coolant Pump Fabricator - Units 2 & 3	6/30/2008	6/30/2008
08-2Q-2 Contractor Issue PO to Pressurizer Fabricator - Units 2 & 3	8/31/2008	8/31/2008
08-2Q-2 Contractor Issue PO to Reactor Coolant Loop Pipe Fabricator - First Payment - Units 2 & 3	6/30/2008	6/30/2008
08-2Q-2 Reactor Vessel Internals - Issue Long Lead Material PO to Fabricator - Units 2 and 3	11/21/2008	11/21/2008

Updated Milestone Description	Revised Completion Date	Actual Completion Date
08-2Q-2 Contractor Issue Long Lead Material PO to Reactor Vessel Fabricator - Units 2 & 3	6/30/2008	6/30/2008
08-2Q-2 Contractor Issue PO to Integrated Head Package Fabricator - Units 2 & 3	7/31/2009	
08-2Q-2 Control Rod Drive Mechanism Issue PO for Long Lead Material to Fabricator - Units 2 and 3 - first payment	6/21/2008	6/21/2008
08-2Q-2 Issue P.O.'s to nuclear component fabricators for Nuclear Island structural CA20 Modules	7/31/2009	
08-3Q-1 Start Site Specific and balance of plant detailed design	9/11/2007	9/11/2007
08-3Q-2 Instrumentation & Control Simulator - Contractor Place Notice to Proceed - Units 2 & 3	10/31/2008	10/31/2008
08-3Q-3 Steam Generator - Issue Final PO to Fabricator for Units 2 and 3	6/30/2008	6/30/2008
08-3Q-3 Reactor Vessel Internals - Contractor Issue PO for Long Lead Material (Heavy Plate and Heavy Forgings) to Fabricator - Units 2 & 3	1/31/2010	
08-3Q-3 Contractor Issue Final PO to Reactor Vessel Fabricator - Units 2 & 3	9/30/2008	9/30/2008
08-3Q-4 Variable Frequency Drive Fabricator Issue Transformer PO - Units 2 & 3	4/30/2009	
08-4Q-1 Start clearing, grubbing and grading	1/26/2009	1/26/2009

Updated Milestone Description	Revised Completion Date	Actual Completion Date
08-4Q-2 Core Makeup Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	10/31/2008	10/31/2008
08-4Q-2 Acumulator Tank Fabricator Issue Long Lead Material PO - Units 2 & 3	10/31/2008	10/31/2008
08-4Q-2 Pressurizer Fabricator Issue Long Lead Material PO - Units 2 & 3	10/31/2008	10/31/2008
08-4Q-2 Reactor Coolant Loop Pipe - Contractor Issue PO to Fabricator - Second Payment - Units 2 & 3	4/30/2009	
08-4Q-2 Integrated Head Package - Issue PO to Fabricator - Units 2 and 3 - second payment	7/31/2009	
08-4Q-2 Control Rod Drive Mechanisms - Contractor Issue PO for Long Lead Material to Fabricator - Units 2 & 3	6/30/2008	6/30/2008
08-4Q-2 Contractor Issue PO to Passive Residual Heat Removal Heat Exchanger Fabricator - Second Payment - Units 2 & 3	10/31/2008	10/31/2008
09-1Q-1 Start Parr Road intersection work.	2/13/2009	2/13/2009
09-1Q-2 Reactor Coolant Pump - Issue Final PO to Fabricator - Units 2 and 3	6/30/2008	6/30/2008
09-1Q-3 Integrated Heat Packages Fabricator Issue Long Lead Material PO - Units 2 & 3	10/31/2009	
09-1Q-4 Design Finalization Payment 3	1/31/2009	1/31/2009

Updated Milestone Description	Revised Completion Date	Actual Completion Date
09-2Q-1 Start site development	6/23/2009	6/23/2009
09-2Q-2 Contractor Issue PO to Turbine Generator Fabricator - Units 2 & 3	2/28/2009	2/17/2009
09-2Q-2 Contractor Issue PO to Main Transformers Fabricator - Units 2 & 3	9/30/2009	
09-2Q-3 Core Makeup Tank Fabricator Notice to Contractor Receipt of Long Lead Material - Units 2 & 3	11/30/2010	
09-2Q-4 Design Finalization Payment 4	4/30/2009	
09-3Q-1 Turbine Generator Fabricator Issue PO for Condenser Material - Unit 2	8/31/2009	
09-3Q-2 Reactor Coolant Pump Fabricator Issue Long Lead Material Lot 2 - Units 2 & 3	4/30/2009	
09-3Q-2 Passive Residual Heat Removal Heat Exchanger Fabricator Receipt of Long Lead Material - Units 2 & 3	5/31/2010	
09-3Q-3 Design Finalization Payment 5	7/31/2009	
09-4Q-1 Start erection of construction buildings, to include craft facilities for personnel, tools, equipment; first aid facilities; field offices for site management and support personnel; temporary warehouses; and construction hiring office.	10/9/2009	
09-4Q-2 Reactor Vessel Fabricator Notice to Contractor of Receipt of Flange Nozzle Shell Forging - Unit 2	7/31/2009	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
09-4Q-3 Design Finalization Payment 6	10/31/2009	
09-4Q-4 Instrumentation and Control Simulator - Contractor Issue PO to Subcontractor for Radiation Monitor System - Units 2 & 3	12/31/2009	
10-1Q-1 Reactor Vessel Internals - Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	6/30/2011	
10-1Q-2 Turbine Generator Fabricator Issue PO for Moisture Separator Reheater/Feedwater Heater Material - Unit 2	4/30/2010	
10-1Q-3 Reactor Coolant Loop Pipe Fabricator Acceptance of Raw Material - Unit 2	4/30/2010	
10-2Q-1 Reactor Vessel Internals - Fabricator Start Weld Neutron Shield Spacer Pads to Assembly - Unit 2	10/31/2011	
10-2Q-2 Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 2	6/30/2009	
10-2Q-3 Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 2	11/30/2010	
10-3Q-1 Start excavation and foundation work for the standard plant for Unit 2	3/15/2010	
10-3Q-2 Steam Generator Fabricator Notice to Contractor of Receipt of 2nd Steam Generator Tubesheet Forging - Unit 2	2/28/2010	
10-3Q-3 Reactor Vessel Fabricator Notice to Contractor of Outlet Nozzle Welding to Flange Nozzle Shell Completion - Unit 2	2/28/2010	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
10-3Q-4 Turbine Generator Fabricator Notice to Contractor Condenser Fabrication Started - Unit 2	5/31/2010	
10-4Q-1 Complete preparations for receiving the first module on site for Unit 2.	8/18/2010	
10-4Q-2 Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Transition Cone Forging - Unit 2	4/30/2010	
10-4Q-3 Reactor Coolant Pump Fabricator Notice to Contractor of Manufacturing of Casing Completion - Unit 2	11/30/2010	
10-4Q-4 Reactor Coolant Loop Pipe Fabricator Notice to Contractor of Machining, Heat Treating & Non-Destructive Testing Completion - Unit 2	12/31/2010	
11-1Q-1 Core Makeup Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 2	5/31/2011	
11-1Q-2 Polar Crane Fabricator Issue PO for Main Hoist Drum and Wire Rope - Units 2 & 3	2/28/2011	
11-2Q-1 Control Rod Drive Mechanisms - Fabricator to Start Procurement of Long Lead Material - Unit 3	6/30/2011	
11-2Q-2 Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 2	10/31/2011	
11-3Q-1 Start placement of mud mat for Unit 2	7/14/2011	
11-3Q-2 Steam Generator Fabricator Notice to Contractor of Receipt of 1st Steam Generator Tubing - Unit 2	1/31/2011	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
11-3Q-3 Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2	10/31/2010	
11-3Q-4 Reactor Vessel Fabricator Notice to Contractor of Closure Head Cladding Completion - Unit 3	2/28/2012	
11-4Q-1 Begin Unit 2 first nuclear concrete placement	10/3/2011	
11-4Q-2 Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 2	9/30/2011	
11-4Q-3 Fabricator Start Fit and Welding of Core Shroud Assembly - Unit 2	6/30/2011	
11-4Q-4 Steam Generator Fabricator Notice to Contractor of Completion of 1st Steam Generator Tubing Installation - Unit 2	5/31/2011	
11-4Q-5 Reactor Coolant Loop Pipe - Shipment of Equipment to Site - Unit 2	12/31/2012	
11-4Q-6 Control Rod Drive Mechanism - Ship Remainder of Equipment (Latch Assembly & Rod Travel Housing) to Head Supplier - Unit 2	12/31/2011	
11-4Q-7 Pressurizer Fabricator Notice to Contractor of Welding of Upper and Intermediate Shells Completion - Unit 2	10/31/2010	
11-4Q-8 Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 2	6/30/2011	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
11-4Q-9 Design Finalization Payment 14	10/31/2011	
12-1Q-1 Set module CA04 for Unit 2	1/27/2012	
12-1Q-2 Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Final Post Weld Heat Treatment - Unit 2	6/30/2010	
12-1Q-3 Passive Residual Heat Removal Heat Exchanger Fabricator Notice to Contractor of Completion of Tubing - Unit 2	1/31/2011	
12-1Q-4 Polar Crane Fabricator Notice to Contractor of Girder Fabrication Completion - Unit 2	2/28/2012	
12-1Q-5 Turbine Generator Fabricator Notice to Contractor Condenser Ready to Ship - Unit 3	8/31/2013	
12-2Q-1 Set Containment Vessel ring #1 for Unit 2	4/3/2012	
12-2Q-2 Reactor Coolant Pump Fabricator Delivery of Casings to Port of Export - Unit 2	3/31/2012	
12-2Q-3 Reactor Coolant Pump Fabricator Notice to Contractor of Stator Core Completion - Unit 3	8/31/2013	
12-2Q-4 Reactor Vessel Fabricator Notice to Contractor of Receipt of Core Shell Forging - Unit 3	9/30/2012	
12-2Q-5 Contractor Notified that Pressurizer Fabricator Performed Cladding on Bottom Head - Unit 3	1/31/2013	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
12-3Q-1 Set Nuclear Island structural module CA03 for Unit 2	8/30/2012	
12-3Q-2 Squib Valve Fabricator Notice to Contractor of Completion of Assembly and Test for Squib Valve Hardware - Unit 2	5/31/2012	
12-3Q-3 Accumulator Tank Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	12/31/2012	
12-3Q-4 Polar Crane Fabricator Notice to Contractor of Electric Panel Assembly Completion - Unit 2	7/31/2012	
12-4Q-1 Start containment large bore pipe supports for Unit 2	4/9/2012	
12-4Q-2 Integrated Head Package - Shipment of Equipment to Site - Unit 2	10/31/2012	
12-4Q-3 Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 2	11/30/2012	
12-4Q-4 Steam Generator Fabricator Notice to Contractor of Completion of 2nd Steam Generator Tubing Installation - Unit 3	5/31/2013	
12-4Q-5 Steam Generator Fabricator Notice to Contractor of Satisfactory Completion of 1st Steam Generator Hydrotest - Unit 2	5/31/2012	
13-1Q-1 Start concrete fill of Nuclear Island structural modules CA01 and CA02 for Unit 2	2/26/2013	

Updated Milestone Description	Revised Completion Date	Actual completion Date
13-1Q-2 Passive Residual Heat Removal Heat Exchanger - Delivery of Equipment to Port of Entry - Unit 2	4/30/2012	
13-1Q-3 Refueling Machine Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 2	2/28/2013	
13-1Q-4 Deliver Reactor Vessel Internals to Port of Export - Unit 2	7/31/2013	
13-2Q-1 Set Unit 2 Containment Vessel	4/17/2013	
13-2Q-2 Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 2	3/31/2013	
13-2Q-3 Turbine Generator Fabricator Notice to Contractor Turbine Generator Ready to Ship - Unit 2	4/30/2013	
13-2Q-4 Pressurizer Fabricator Notice to Contractor of Satisfactory Completion of Hydrotest - Unit 3	2/28/2014	
13-2Q-5 Polar Crane - Shipment of Equipment to Site - Unit 2	5/31/2013	
13-2Q-6 Receive Unit 2 Reactor Vessel on site from fabricator	5/20/2013	
13-3Q-1 Set Unit 2 Reactor Vessel	6/18/2013	
13-3Q-2 Steam Generator Fabricator Notice to Contractor of Completion of 2nd Channel Head to Tubesheet Assembly Welding - Unit 3	12/31/2013	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
13-3Q-3 Reactor Coolant Pump Fabricator Notice to Contractor of Final Stator Assembly Completion - Unit 3	8/31/2014	
13-3Q-4 Reactor Coolant Pump - Shipment of Equipment to Site (2 Reactor Coolant Pumps) - Unit 2	9/30/2013	
13-3Q-5 Place first nuclear concrete for Unit 3	8/1/2013	
13-4Q-1 Set Unit 2 Steam Generator	9/9/2013	
13-4Q-2 Main Transformers Ready to Ship - Unit 2	9/30/2013	
13-4Q-3 Complete Unit 3 Steam Generator Hydrotest at fabricator*	2/28/2014	
13-4Q-4 Set Unit 2 Containment Vessel Bottom Head on basemat legs	11/21/2011	
14-1Q-1 Set Unit 2 Pressurizer Vessel	1/24/2014	
14-1Q-2 Reactor Coolant Pump Fabricator Notice to Contractor of Satisfactory Completion of Factory Acceptance Test - Unit 3	2/28/2015	
14-1Q-3 Deliver Reactor Vessel Internals to Port of Export - Unit 3	6/30/2015	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
14-1Q-4 Main Transformers Fabricator Issue PO for Material - Unit 3	4/30/2014	
14-2Q-1 Complete welding of Unit 2 Passive Residual Heat Removal System piping	3/19/2014	
14-2Q-2 Steam Generator - Contractor Acceptance of Equipment at Port of Entry - Unit 3	4/30/2015	
14-2Q-3 Refueling Machine - Shipment of Equipment to Site - Unit 3	5/31/2014	
14-3Q-1 Set Unit 2 Polar Crane	4/3/2014	
14-3Q-2 Reactor Coolant Pumps - Shipment of Equipment to Site - Unit 3	6/30/2015	
14-3Q-3 Main Transformers Ready to Ship - Unit 3	9/30/2014	
14-4Q-1 Spent Fuel Strorage Rack - Shipment of Last Rack Module - Unit 3	12/31/2014	
15-1Q-1 Start electrical cable pulling in Unit 2 Auxillary Building	12/26/2014	
15-1Q-2 Complete Unit 2 Reactor Coolant System cold hydro	8/3/2015	
15-2Q-1 Activate class 1E DC power in Unit 2 Auxilary Building.	3/5/2015	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
15-3Q-1 Complete Unit 2 hot functional test.	9/21/2015	
15-3Q-2 Install Unit 3 ring 3 for containment vessel	7/30/2015	
15-4Q-1 Load Unit 2 nuclear fuel	10/28/2015	
16-1Q-1 Unit 2 Substantial Completion	4/1/2016	
16-2Q-1 Set Unit 3 Reactor Vessel	10/1/2015	
16-3Q-1 Set Unit 3 Steam Generator #2	12/22/2015	
16-4Q-1 Set Unit 3 Pressurizer Vessel	5/16/2016	
17-1Q-1 Complete welding of Unit 3 Passive Residual Heat Removal System piping	6/20/2016	
17-2Q-1 Set Unit 3 polar crane	7/18/2016	
17-3Q-1 Start Unit 3 Shield Building roof slab rebar placement	1/16/2017	
17-4Q-1 Start Unit 3 Auxiliary Building electrical cable pulling	4/6/2017	

Updated Milestone Description	Revised Completion Date	Actual Completion Date
18-1Q-1 Activate Unit 3 Auxiliary Building class 1E DC power	6/9/2017	
18-2Q-1 Complete Unit 3 Reactor Coolant System cold hydro	1/1/2018	
18-2Q-1 Complete Unit 3 hot functional test	2/15/2018	
18-3Q-1 Complete Unit 3 nuclear fuel load	7/31/2018	
18-4Q-1 Begin Unit 3 full power operation	10/31/2018	
19-1Q-1 Unit 3 Substantial Completion	1/1/2019	
***13-4Q-3** This Milestone was incorrect in the May 2009 filing due to a transposition error. It has been corrected to reflect the original BLRA Milestone.		

Exhibit No. __ (CLW-1) Public Version
SCE&G

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of $)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Per Order 2009 104-A Adjusted

Plant Cost Categories	Total	Actual 2007	Actual 2008	Projected 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fixed with No Adjustment													
Firm with Fixed Adjustment A													
Firm with Fixed Adjustment B													
Firm with Indexed Adjustment													
Actual Craft Wages													
Non-Labor Costs													
Time & Materials													
Owners Costs													
Transmission Projects	718,579	-	29	676	1,844	3,897	6,998	17,226	47,423	77,380	84,716	200,368	278,021
Total Base Project Costs(2007 $)	4,096,455	21,723	97,494	325,826	392,677	444,400	614,959	614,378	488,205	412,858	302,460	186,739	194,736
Total Project Contingency(2007 $)	438,291	-	-	37,858	40,770	49,410	55,475	57,450	56,287	49,823	29,746	32,424	29,049
Total Project Commitment(2007$)	4,534,746	21,723	97,494	363,684	433,447	493,810	670,434	671,828	544,492	462,681	332,206	219,162	223,785
Total Project Escalation	2,024,830	-	3,411	25,340	67,074	111,355	220,977	291,019	294,518	293,322	264,022	204,824	248,967
Total Revised Project Cash Flow	6,559,576	21,723	100,905	389,024	500,521	605,164	891,411	962,846	839,011	756,003	596,227	423,986	472,752
Cumulative Project Cash Flow(Revised)		21,723	122,629	511,653	1,012,174	1,617,339	2,508,750	3,471,596	4,310,607	5,066,610	5,662,837	6,086,824	6,559,576
AFUDC(Capitalized Interest)	315,739	645	3,496	15,973	23,979	28,098	36,328	45,517	45,035	39,297	25,923	22,789	28,659
Construction Work in Process		22,368	126,770	531,766	1,056,257	1,689,529	2,617,268	3,625,631	4,509,577	5,304,977	5,927,128	6,373,904	6,875,315

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